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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,589	09/05/2003	Kazushige Oki	50212-533	7325
20277	7590	02/07/2006	EXAMINER	
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			WONG, TINA MEI SENG	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

**10/655,589**

**Applicant(s)**

OKI, KAZUSHIGE

**Examiner**

**Tina M. Wong**

## Art Unit

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4-11 and 14-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 16 is/are allowed.
- 6) ☒ Claim(s) 1,6-11,14,17,18 and 20 is/are rejected.
- 7) ☒ Claim(s) 4,5 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 January 2006 has been entered.

### ***Claim Objections***

Claim 15 is objected to because of the following informalities: On Line 10, the word “cashing” appears to be a typographical error. The Examiner believes the word should read “casing”. Appropriate correction is required.

Claim 18 is objected to because of the following informalities: On Line 11, the punctuation mark “.” appears after the word “therebetween”. The Examiner believes this is a typographical error and the end of the claim is on Line 13, after the word “casing”. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 6-11, 14, 17, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,830,383 to Huang.**

In regards to claim 1, Huang discloses an optical module (99) comprising a housing having a lower casing (2) integrated with a receptacle (4) and a mount (20), an upper casing (3) engaged with the lower casing, and a cover (1) for covering the upper casing; a block (44) mounted on the lower casing; an optical subassembly (6) mounted on the block and optically coupled with an optical connector (Column 2, Lines 55-65) mated with the receptacle; and a substrate (5) mounted on the mount of the lower casing and supported by the block, the substrate being electrically connected (605 & 520) to the optical subassembly. Furthermore, Huang discloses openings (41, 42) in the block with a rear portion (44) that are used to support and mount the optical subassembly, therefore, creating a mounting portion.

But Huang fails to specifically disclose the block to have a substrate supporting portion and a substrate pressing portion, where the substrate is sandwiched between the supporting and pressing portion to define relative positions of the block, subassembly and the substrate. However, Huang does disclose two different sets of supporting, pressing and mounting portions to secure the substrate. The first method Huang discloses to secure the substrates is by a set of four leads (605). As shown in Figure 2, two of the leads are supporting the substrate (5) and in Figure 3, two of the leads are pressing down on the substrate (5), therefore creating a supporting and pressing portion. The second method Huang discloses to secure the substrate is by using the poles (313) of the upper casing to press down on the substrate (the pressing portion) and a support plate (330) of the upper casing to support the substrate (supporting portion). Although Huang discloses the pressing portion and the supporting portion attached to a difference component (the upper casing) and/or on the block and since by placing the pressing and supporting portion on either component both achieve the result of securing the substrate, it would

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have been obvious at the time the invention was made to a person having ordinary skill in the art to have placed the supporting and pressing portions on either the block (as disclosed by Huang's first method) or on the upper casing (as disclosed by Huang's second method), since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70

In regards to claim 14, Huang further disclose the receptacle to have a surface with an opening for abutting against the surface of the block (shown in Figures 1-3) with an opening corresponding to the opening provided in the surface of the receptacle, the optical subassembly being inserted into the opening of the surface of the receptacle and the opening of the block.

In regards to claim 6, Huang further discloses the block to provide a first cutout (441), the lower casing to provide a second cutout (211) and the upper casing to provide a first (142) and second (131) protrusion for engaging with the first and second cutouts, such that the surface of the block abuts against the surface of the receptacle (Shown in Figures 1-3).

In regards to claim 7, Huang further discloses the block to include a center wall and a pair of side walls, where the side walls disposing the center wall therebetween providing a first cutout (441) the mounting portion being disposed between the center wall and one of the side walls.

In regards to claim 8, Huang discloses a second cutout (211) formed in a sidewall (21) of the lower casing.

In regards to claim 9, although Huang does not explicitly disclose the upper casing to include a projection to come in contact with a cutout in the center wall of the block, such that the surfaces of the block abuts the surface of the receptacle, Huang does show in Figures 1-3 the surface of the block to abut against the surface of the receptacle. Furthermore, by placing

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additional projections and cutouts, the components of the optical module would be more secure. Huang has already disclosed using multiple projections and cutouts to engage and secure different components in the optical module. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art included in the upper casing a projection to come in contact with a cutout in the center wall of the block, in order to provide an additional level of stability, since it has been held that a mere duplication of the essential working parts of a device involves only routine skill in the art. *St Regis Paper Co v Bemis Co*, 193 USPQ 8

In regards to claim 10, Huang further discloses a holder (44) for holding the optical subassembly by surrounding the optical subassembly and pressing the optical subassembly to the block.

In regards to claims 11 and 17, Huang fails to specifically disclose the block to be made of resin. However, a resin material is commonly used in a fiber optic connector block, since resin is a good insulator. Therefore it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have used a resin material for the block in a fiber optic connector.

In regards to claims 18 and 20, Huang discloses an optical module (99) comprising a housing having a lower casing (2) engaged with an upper casing (3) and a cover (1) for covering the upper casing, the lower casing integrally including a receptacle (4) and a mount (20), the receptacle mating with an optical connector (Column 2, Lines 55-65); an optical subassembly (6) coupled with the optical connector mated with the receptacle having a plurality of leads (605), a substrate (5) mounted on the mount of the lower casing and electrically connected to the plurality

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of leads, the substrate mounted on the mount of the lower casing and electrically connected to the plurality of leads, a block mounted on the lower casing, where the block supports the optical subassembly and substrate and defines the relative positions of the lower casing and upper casing.

But Huang fails to specifically disclose the block to have a substrate supporting portion and a substrate pressing portion, where the substrate is sandwiched between the supporting and pressing portion to define relative positions of the block, subassembly and the substrate.

However, Huang does disclose two different sets of supporting, pressing and mounting portions to secure the substrate. The first method Huang discloses to secure the substrates is by a set of four leads (605). As shown in Figure 2, two of the leads are supporting the substrate (5) and in Figure 3, two of the leads are pressing down on the substrate (5), therefore creating a supporting and pressing portion. The second method Huang discloses to secure the substrate is by using the poles (313) of the upper casing to press down on the substrate (the pressing portion) and a support plate (330) of the upper casing to support the substrate (supporting portion). Although Huang discloses the pressing portion and the supporting portion attached to a difference component (the upper casing) and/or on the block and since by placing the pressing and supporting portion on either component both achieve the result of securing the substrate, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have placed the supporting and pressing portions on either the block (as disclosed by Huang's first method) or on the upper casing (as disclosed by Huang's second method), since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86

*USPQ* 70



***Allowable Subject Matter***

Claims 4 and 5 are objected to as being dependent upon a rejected base claim for the reasons indicated in the previous Office action, mailed 28, July 2005, Paper number 072005, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In regards to claim 19, the prior art of record fails to disclose or reasonably suggest all of the limitations in the base claim, any intervening claims and a block including a center wall disposed between a pair of side walls, where the center wall provides a substrate supporting portion and the side walls provide a substrate pressing portion in order to secure the substrate to the block.

Claims 15 and 16 are allowed for the reasons indicated in the previous Office action, mailed 28, July 2005, Paper number 072005.

***Response to Arguments***

Applicant's arguments with respect to claims 1, 6-11 and 14 have been considered but are moot in view of the new ground(s) of rejection.

***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference B discusses an alternative configuration of an optical module assembly.



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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M. Wong whose telephone number is (571) 272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
TMW

  
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